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EXAMINER

CHEN, TIANJIE

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/758,390

Applicant(s)

RENKEN ET AL.

Examiner

Tianjie Chen

Art Unit

2627

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30, 32-34, 36, 37 and 39-41, 43 is/are rejected.
- 7) ☒ Claim(s) 31, 35, 38, 42, 44-49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Final Rejection

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 30, 32-34, 36, 37, 39-41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al (US Patent Number 6798618) in view of Khan et al (US 6,155,220).

Claims 30 and 37, Takagi discloses: a head suspension which support a data transducer in a data exchange relation with a storage medium, the head suspension comprising:

a load beam region (Fig. 6, item 5A) comprising a substantially planar portion (Fig. 6) bounded on opposing sides (Fig. 6, item 13);

a bend region (Fig. 6, item 51) comprising first and second strut members (Fig. 6, item 53) extending from said load beam region (Fig. 6);

a mounting region (Fig. 6, item 7A) coupled to the first and second strut members (Fig. 6) to form a central aperture (Fig. 6, aperture is unlabeled) bounded by the mounting region, the first and second strut members and the planar portion of the load beam region (Fig. 6); and

a damping material (Fig. 6, item 47; column 6, lines 15-29) secured to the planar portion of the load beam region (column 6, lines 20-29) between said first and second rails (Fig. 6), said material partially spanning the central aperture (Fig. 6).

Khan et al shows a head suspension having first and second stiffener rail 36 and 38 and teaches that these rails provide stiffness for the forward portion (Column 5, lines 26-30). One of ordinary skill in the art would add the rails taught by Khan et al into Takagi et al's device for improving stiffness.

Claims 32 and 39, Takagi discloses the features of base claims 30 and 37, as stated in the 102 rejection above, and further discloses: a head suspended at one end of the planar portion of the load beam region opposite the mounting region (Fig. 7, item 39).

Claims 33 and 40, Takagi discloses the features of base claims 30 and 37, as stated in the 102 rejection above, and further discloses: wherein the mounting region is coupled to a rigid actuator arm (Fig. 7).

Claims 34 and 41, Takagi discloses the features of base claims 30 and 37, as stated in the 102 rejection above, and further discloses:

wherein the damping material is secured to the planar portion of the load beam region (Fig. 7, item 47 spans aperture and is attached to the load beam region and the mounting region) symmetrically across a longitudinal axis which bisects the planar portion along a length thereof and terminates at a data transducer supported at a distal end thereof (Fig. 7).

Claims 36 and 43, Takagi discloses the features of base claims 30 and 37, as stated in the 102 rejection above, and further discloses: at least one mass adjustment area which extends through the planar portion of the load beam region (Fig. 6, items 49).

Allowable Subject Matter

2. Claims 31, 35, 38, 42 and 44-49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

- With regard to claims 31, 35, 38, 42 and 44-49, Takagi et al (US 6,798,618) **fails to show** the head suspension further comprising a damping material support structure which partially supports said layer, the dampening material support structure comprising a cantilever projection which extends from the planar portion of the load beam region into the central aperture between the

first and second struts/and the damping material spans a plurality of isolation channels adjacent to the damping material support structure.

Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant further argues: "Further, Takagi '618 fails to disclose a head suspension "which supports a data transducer in a data exchange relationship with a storage medium," as featured by independent claims 30 and 37. As noted above, Takagi '618 provides a partially formed." This argument is groundless. Prior art clearly shows that this is "A head suspension for a disk drive" (See Abstract); it is surely for supporting a data transducer in a data exchange relationship with a storage medium.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tianjie Chen/
Primary Examiner, Art Unit 2627